

Claims

1. A flanged joint (1), comprising at least one flat gasket (10) held between the facing flange surfaces (2, 4) of components (6, 8), such as lines or container parts, which store or guide a pressurized medium, characterized in that at least one lamella ring (20, 22, 24; 48; 50, 52, 54; 56; 58) is held in an annular groove (16) and biased, essentially without a gap, against a working diameter (40) radially opposing the annular groove (16), is arranged upstream of the flat gasket (10), in the direction of the pressure difference from the pressure side to the environment side.
2. The flanged joint according to claim 1, characterized in that said at least one lamella ring (20, 22, 24; 48; 50, 52, 54; 56; 58) is held in said annular groove (16) with little axial play.
3. The flanged joint according to claim 2, characterized in that said at least one lamella ring (20, 22, 24; 48; 50, 52, 54; 56; 58) is arranged in said annular groove (16) parallel to the plane of the flange surfaces (2, 4).
4. The flanged joint according to at least one of the preceding claims, characterized in that a plurality of lamella rings (20, 22, 24; 50, 52, 54; 56; 58) is axially arranged in series.
5. The flanged joint according to claim 4, characterized in that, of said plurality of lamella rings (20, 22, 24) axially arranged in series, at least the lamella ring (20) facing the pressure side and the lamella ring (24) facing the environment side are biased against the working diameter, and at least one lamella ring (22) axially arranged between these lamella rings (20, 24) is biased against a bottom of said annular groove (16).
6. The flanged joint according to at least one of the preceding claims, characterized in that the lamella ring (50, 52, 54; 56; 58) is a single-turn lamella ring with an axial abutment opening of a steel band extending in one plane.

7. The flanged joint according to at least one of claims 1 to 5, characterized in that said lamella ring is a single-turn disk-like lamella ring (56; 58) of a steel band formed in the manner and form of a disk spring.

8. The flanged joint according to claim 7, characterized in that at least a pair of two disk-like lamella rings (56; 58) is provided axially opposing each other with respect to their conical form.

9. The flanged joint according to at least one of claims 1 to 5, characterized in that said lamella ring is a double-turn lamella ring (20, 22, 24) of a steel band of constant width, or of a different metal, wherein the ends (26, 28) of the double turns protrude towards the inside or toward the outside in a relaxed state of the double-turn lamella ring (20, 22, 24) departing from a circular form provided by the rest of the double-turn lamella ring, and are in alignment with the circular form of the double-turn lamella ring (20, 22, 24) in a biased state.

10. The flanged joint according to at least one of the preceding claims, characterized in that the two components (6, 8) have a radial overlapping area (32) in such a way that one (6) of said components has an axially protruding annular collar (34) engaging a complementary, annular recess (36) of the other one (8) of said components, which has its inner circumferential surface (40) forming the working diameter.

11. The flanged joint according to claim 10, characterized in that said annular groove (16) open toward the outside is formed in said axially protruding annular collar (34) of the one (6) of said components.